METZ CONNECT

We realize ideas

MCO IP69k – protective housing for DNT outdoor applications



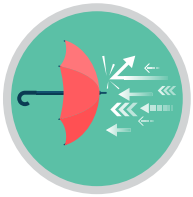
P | Cabling

MCO IP69k – protective housing for DNT* outdoor applications



Digital networking | The demand for outdoor cabling solutions is growing unabated. This is due to modern network and IP interface technologies, which are essential for digitization. These will enable the networking and deployment of surveillance cameras, sensors and digital traffic signs, as well as wireless access points.

METZ CONNECT Outdoor | Our MCO IP69k protective enclosures provide reliable protection for your permanent outdoor connections. They are not only completely dustproof and waterproof, but also resistant to ozone, UV radiation and salt water. Furthermore, they withstand high temperatures, strong vibrations and high-pressure jet cleaning, thus providing reliable protection against external interference. The flexible and easy-to-install solutions have been specially designed to accommodate and protect field-assembled cables, pre-assembled patch cables and fiber optic (FO) connections.





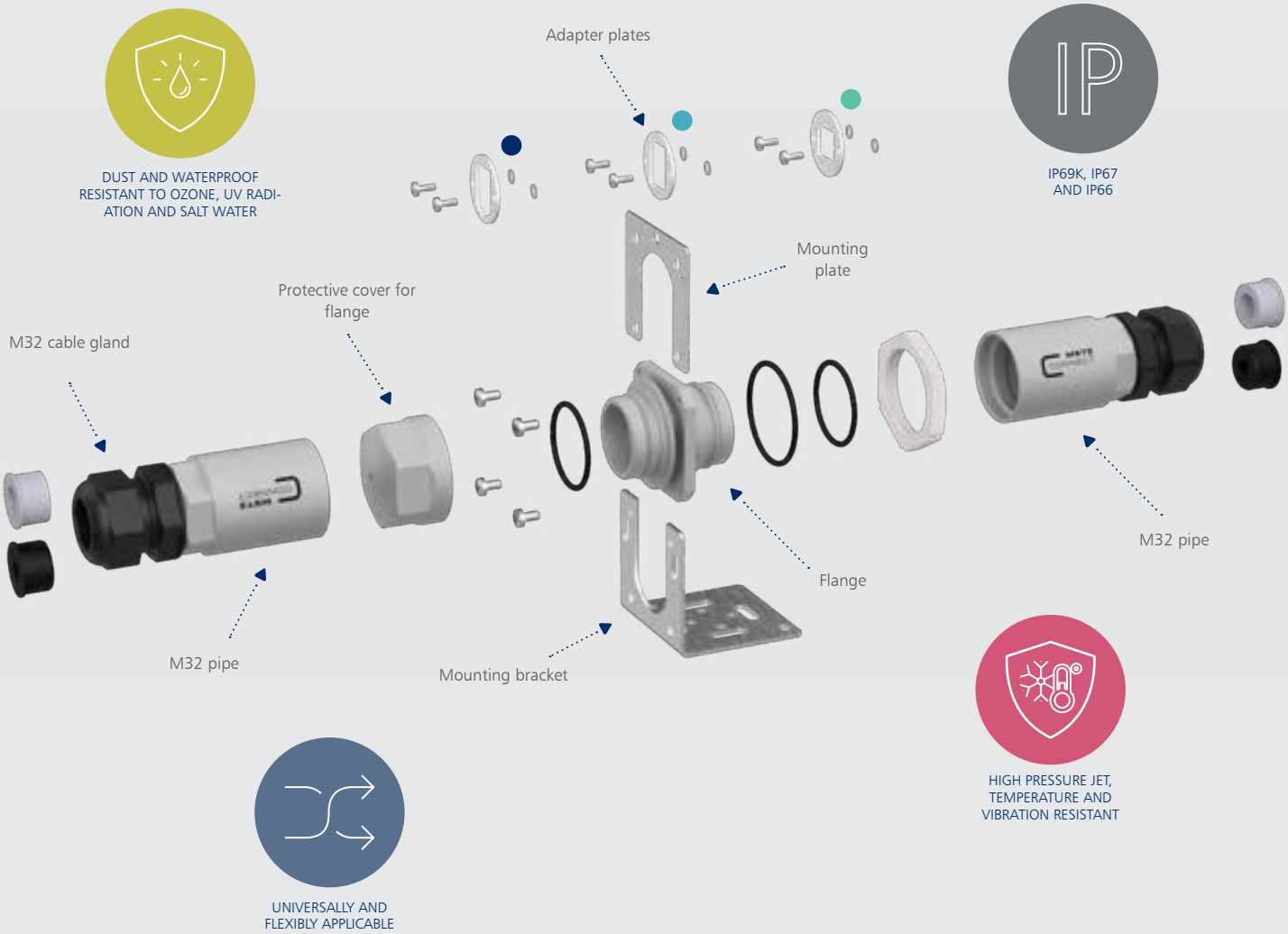
Flexible & reliable | Our universally applicable protective housings for outdoor applications are available in three different versions, and cover all conceivable applications in practice. The three variants of the protective housings have been specially designed for free installation, as well as for wall, DIN rail, quick and pole mounting. In addition, we also offer a solution for wall or housing feed-through.

Thanks to the adapter plates included in the delivery contents, countless combinations are possible with various modules, plug-in connectors, and cable connectors, regardless of whether it is a matter of accommodating and protecting field-assembled cables or pre-assembled patch cables and fiber optic (FO) connections.

*DNT = Data Network Technology



Structure


DUST AND WATERPROOF RESISTANT TO OZONE, UV RADIATION AND SALT WATER
Adapter plates
IP
IP69K, IP67 AND IP66
Mounting plate
Protective cover for flange
M32 cable gland
M32 pipe
Mounting bracket
Flange
M32 pipe
HIGH PRESSURE JET, TEMPERATURE AND VIBRATION RESISTANT
UNIVERSALLY AND FLEXIBLY APPLICABLE
MC module
Keystone
Fiber optic (FO)

Variant

MCO IP69k – set for free laying

Part Number: 14040000-E



- universally and flexibly applicable
- completely dust and waterproof
- resistant to ozone, UV radiation and salt water
- resistant to high-pressure jet cleaning, high temperatures, and strong vibrations
- tested according to IP69k, IP67 and IP66
- M32 anodized aluminum tubes and flange
- incl. M32 cable glands (PA) with sealing inserts, O-rings, and adapter plates for MC module, keystone and fiber optic (FO) components, for clean mounting inside the flange
- suitable for cable sheath diameters from 4.5 to 15 mm

MCO IP69k – set with mounting bracket

Part Number: 14040010-E



- designed for wall, top-hat rail, quick and pole mounting
- incl. mounting bracket and mounting plate for quick and tool-free fixation of the flange
- universally and flexibly applicable
- completely dust and waterproof
- resistant to ozone, UV radiation, and salt water
- resistant to high-pressure jet cleaning, high temperatures, and strong vibrations
- tested according to IP69k, IP67 and IP66
- M32 anodized aluminum tubes and flange
- incl. M32 cable glands (PA) with sealing inserts, O-rings, and adapter plates for MC module, keystone and fiber optic (FO) components, for clean mounting inside the flange
- suitable for cable sheath diameters from 4.5 to 15 mm
- Top-hat rail adapter not included in the delivery contents, P/N: 1308990111-I

MCO IP69k – set wall and housing bushing

Part Number: 14040100-E



- incl. M40 locknut (PA) for wall and housing mounting
- universally and flexibly applicable
- completely dust and waterproof
- resistant to ozone, UV radiation, and salt water
- resistant to high-pressure jet cleaning, high temperatures, and strong vibrations
- tested according to IP69k, IP67, and IP66
- M32 anodized aluminum tube and flange
- incl. M32 cable gland (PA) with sealing inserts, O-rings, and adapter plates for MC module, keystone and fiber optic (FO) components, for clean mounting inside the flange
- suitable for cable sheath diameters from 4.5 to 15 mm

Accessories

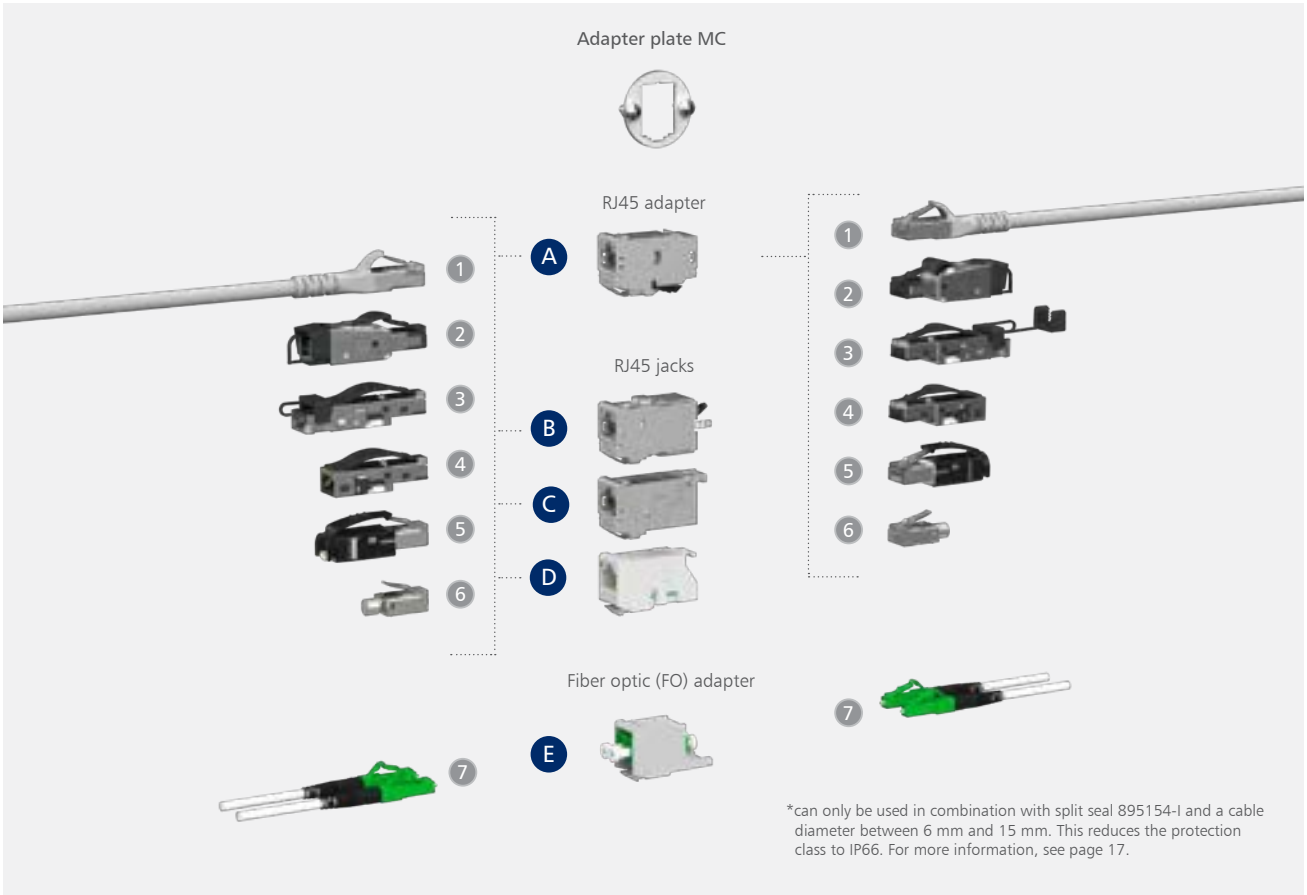
MCO IP69k – protective cover for flange

Part Number: 14040Z02-E



- M32 anodized aluminum protective cover
- suitable for P/N: 14040000-E, 14040010-E, 14040100-E

Compatibility – MC module Adapter Plate



*can only be used in combination with split seal 895154-I and a cable diameter between 6 mm and 15 mm. This reduces the protection class to IP66. For more information, see page 17.

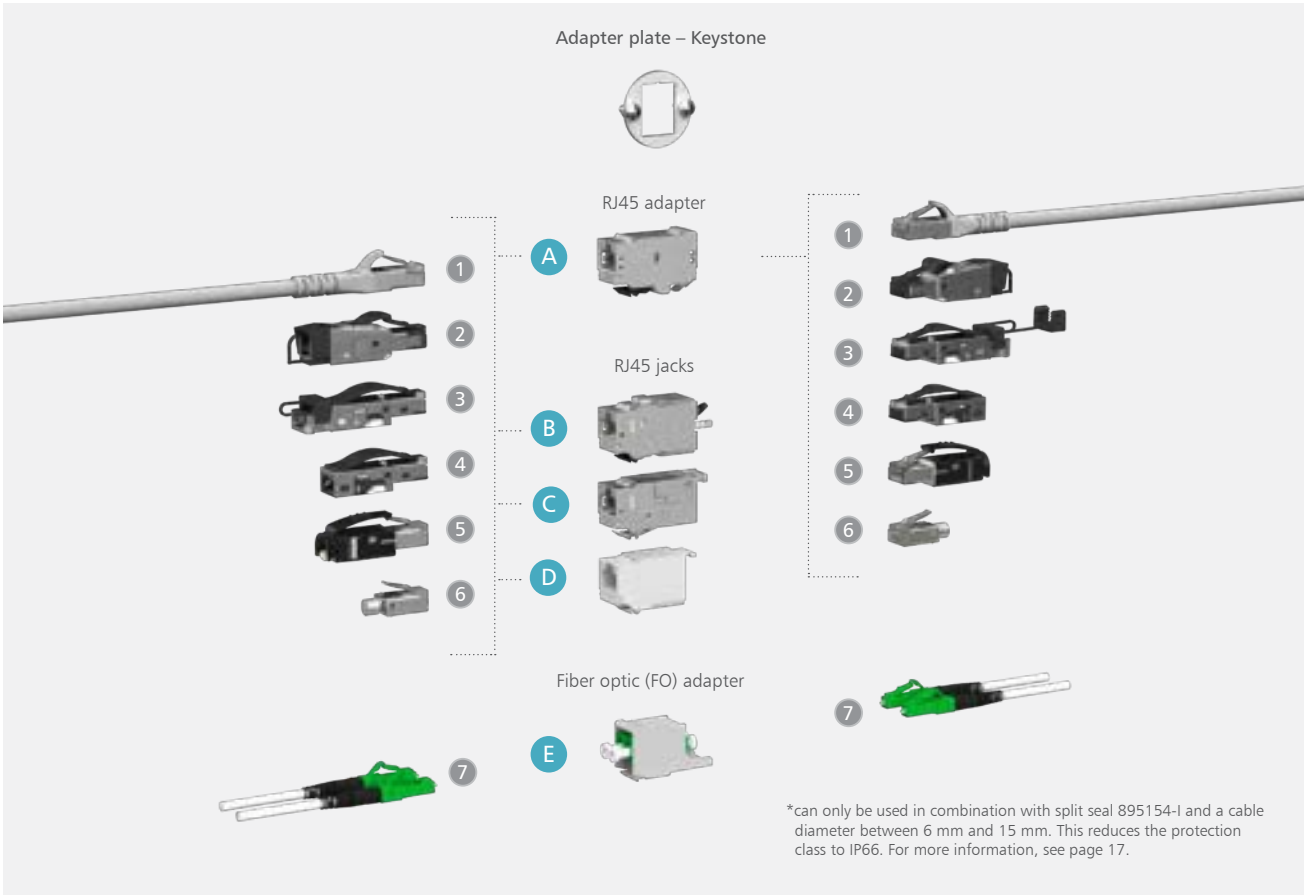
	PRODUCT NAME	FEATURES	P/N
A	E-DAT modul adapter	8(8) 180° Cl. E_A	1309A0-I
B	$C6_A$module 180° jack	single	130B11-E
		PU 12	130B11-Z
B	25Gmodul	single	130B11-25-E
		PU 12	130B11-25-Z
C	E-DAT modul Cat.6_A 8(8) jack, T568A	single	130910-I
		PU 12	130910-Z
D	UAE modul 8(8) Cat.6_A	white	130A11-I
		black	130A11-29-I

	PRODUCT NAME	FEATURES	P/N
D	UAE modul white	Cat.6 jack T568A	130909-I
		Cat.5e	130908-I-B1
2	RJ45 field plug pro	$C6_A$	130E405032-E
		$C6_A$, PU 100	130E405032-K
		40G	130H405032-E
		25G	130G405032-E
		C5 PROFINET	130E405032PE
3	E-DAT Industry field plug	Cat.6 Clas. E_A	1401405012-I
		PROFINET	1401405012PI

	PRODUCT NAME	FEATURES	P/N
4	E-DAT field plug short	Cat.6 Class E_A	1401400812-E
5	E-DAT Industry connector	Cat.6 Class E_A	1401505012-E
6	E-DAT Industry connector	Cat.6 Class E_A	1401505010-E
E	OpDAT module **LC-Duplex**	OS2	15091071-I
		OM3	15091072-I
		OM4	15091075-I
		APC OS2	15091076-I
		OM2	1509107B-I
		OM5	1509107M-I
7	OpDAT FAST™ Connector kit **LC PC OM3/OM4 for buffers**	PU 10	1509MAJO0010-F
		PU 20 incl. tool	1509MAJO002C-F
		PU 100 incl. tool	1509MAJO010C-F
7	OpDAT FAST™ Connector kit **LC PC OM3/OM4 for cable**	PU 10	1509MKJO0010-F
		PU 20 incl. tool	1509MKJO002C-F
		PU 100 incl. tool	1509MKJO010C-F
7	OpDAT FAST™ Hybrid Connector kit **LC APC OS2 for buffers**	PU 10	1509QAJA0010-E
		PU 20 incl. tool	1509QAJA002C-E
		PU 100 incl. tool	1509QAJA010C-E
7	OpDAT FAST™ Hybrid Connector kit **LC UPC OS2 for buffers**	PU 10	1509QAJO0010-E
		PU 20 incl. tool	1509QAJO002C-E
		PU 100 incl. tool	1509QAJO010C-E

	PRODUCT NAME	FEATURES	P/N
7	OpDAT FAST™ Hybrid Connector kit **LC APC OS2 for cable**	PU 10	1509QKJA0010-E
		PU 20 incl. tool	1509QKJA002C-E
		PU 100 incl. tool	1509QKJA010C-E
7	OpDAT FAST™ Hybrid Connector kit **LC UPC OS2 for cable**	PU 10	1509QKJO0010-E
		PU 20 incl. tool	1509QKJO002C-E
		PU 100 incl. tool	1509QKJO010C-E

Compatibility – Keystone adapter plate



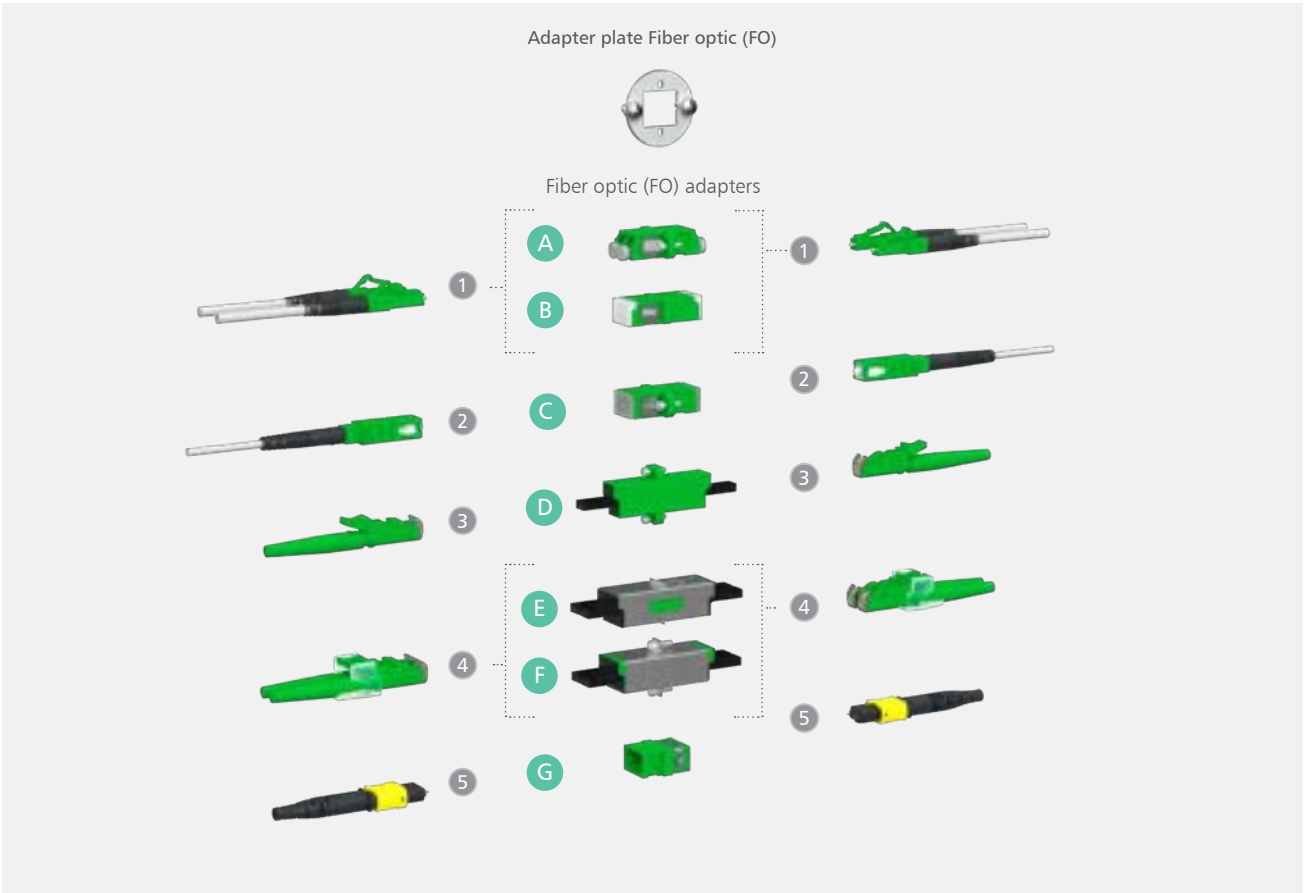
*can only be used in combination with split seal 895154-I and a cable diameter between 6 mm and 15 mm. This reduces the protection class to IP66. For more information, see page 17.

	PRODUCT NAME	FEATURES	P/N
A	E-DAT modul adapter	8(8) 180° Cl. E_A	1309A0-I
B	$C6_A$module K 180° jack – Keystone	single	130B21-E
		PU 12	130B21-Z
B	25Gmodul – Keystone	single	130B21-25-E
		PU 12	130B21-25-Z
C	E-DAT modul Cat.6_A K jack – Keystone	single	130910KI
		PU 12	130910KZ
D	UTP modul 8(8) Cat.6_A	white	130A11KI
		black	130A11-29KI

	PRODUCT NAME	FEATURES	P/N
D	UTP modul	Cat.6 black	130A10-29-I-B1
		Cat.5e white	130A08-I-B1
2	RJ45 field plug pro	$C6_A$	130E405032-E
		$C6_A$, PU 100	130E405032-K
		40G	130H405032-E
		25G	130G405032-E
		C5 PROFINET	130E405032PE
3	E-DAT Industry RJ45 field plug	Cat.6 Clas. E_A	1401405012-I
		PROFINET	1401405012PI

	PRODUCT NAME	FEATURES	P/N
4	E-DAT field plug short	Cat.6 Class E_A	1401400812-E
5	E-DAT Industry connector	Cat.6 Class E_A	1401505012-E
6	E-DAT Industry connector	Cat.6 Class E_A	1401505010-E
E	OpDAT module **LC-Duplex**	OS2	15091071-I
		OM3	15091072-I
		OM4	15091075-I
		APC OS2	15091076-I
		OM2	1509107B-I
		OM5	1509107M-I
7	OpDAT FAST™ Hybrid Connector kit **LC UPC OS2 for buffers**	PU 10	1509QAJO0010-E
		PU 20 incl. tool	1509QAJO002C-E
		PU 100 incl. tool	1509QAJO010C-E
7	OpDAT FAST™ Hybrid Connector kit **LC APC OS2 for cable**	PU 10	1509QKJA0010-E
		PU 20 incl. tool	1509QKJA002C-E
		PU 100 incl. tool	1509QKJA010C-E
7	OpDAT FAST™ Hybrid Connector kit **LC UPC OS2 for cable**	PU 10	1509QKJO0010-E
		PU 20 incl. tool	1509QKJO002C-E
		PU 100 incl. tool	1509QKJO010C-E
7	OpDAT FAST™ Connector kit **LC PC OM3/OM4 for buffers**	PU 10	1509MAJO0010-F
		PU 20 incl. tool	1509MAJO002C-F
		PU 100 incl. tool	1509MAJO010C-F
7	OpDAT FAST™ Connector kit **LC PC OM3/OM4 for cable**	PU 10	1509MKJO0010-F
		PU 20 incl. tool	1509MKJO002C-F
		PU 100 incl. tool	1509MKJO010C-F
7	OpDAT FAST™ Hybrid Connector kit **LC APC OS2 for buffers**	PU 10	1509QAJA0010-E
		PU 20 incl. tool	1509QAJA002C-E
		PU 100 incl. tool	1509QAJA010C-E

Compatibility – **Fiber optic (FO) adapter plate**

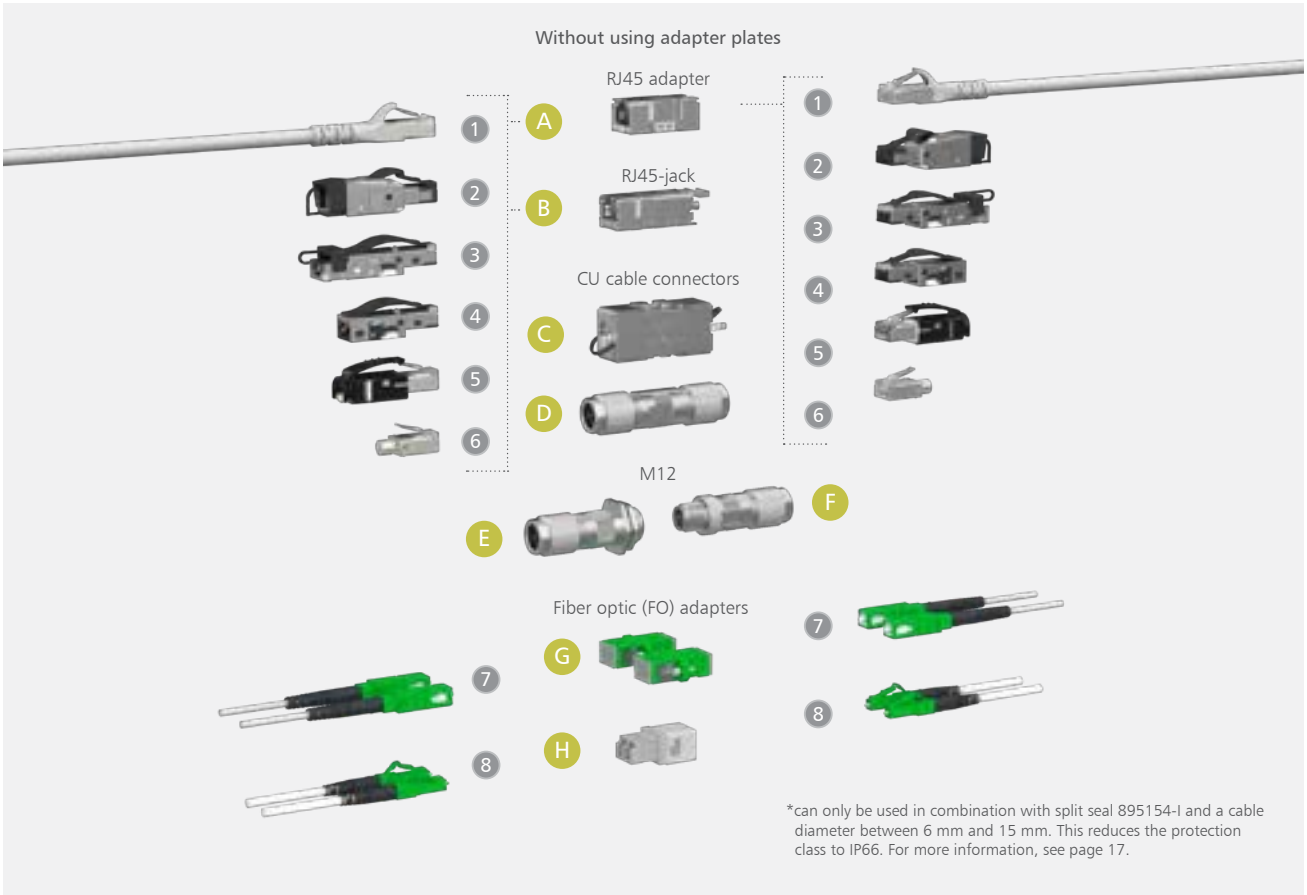


	PRODUCT NAME	FEATURES	P/N
A	OpDAT adapter LC-Duplex OS2	single	15090074-I
		PU 50	15090074-50
A	OpDAT adapter LC-Duplex	OM4	15090075-I
		OM4, PU 50	15090075-50
		OM5	1509007M-I
A	OpDAT adapter LC-Duplex APC OS2	single	15090076-I
		PU 50	15090076-50
A	OpDAT adapter LC-Duplex OM3	single	15090077-I
		PU 50	15090077-50
A	OpDAT adapter LC-Duplex	OM2	1509007B-I

	PRODUCT NAME	FEATURES	P/N
B	OpDAT adapter LC-D APC OS2	Inside shutter	1509007G-I
C	OpDAT adapter SC-Simplex APC OS2	single	1509001A-I
		PU 50	1509001A-50
C	OpDAT adapter SC-Simplex UPC OS2	single	1509001B-I
		PU 50	1509001B-50
C	OpDAT adapter SC-Simplex	OM2, PU 50	15090012-50
		OM3	1509001C-I
		OM3, PU 50	1509001C-50
		OM4	1509001D-I
		OM4, PU 50	1509001D-50

	PRODUCT NAME	FEATURES	P/N
C	OpDAT adapter SC-Simplex APC OS2	with shutter	1509001H-I
C	OpDAT adapter SC-Simplex OM5	OM5	1509001M-I
		OM5, PU 50	1509001M-50
D	OpDAT adapter E2000-Simplex	OM3	1509005H-I
		OM4	1509005G-I
		OM5	1509005M-I
		OS2	15090058-I
		APC OS2	15090059-I
E	OpDAT adapter E2000-Duplex with Snap-In mounting	OM2	1509005A-I
		OS2	1509005B-I
		APC OS2	1509005C-I
F	OpDAT adapter E2000-Duplex with flange mounting	APC OS2	1509005F-I
G	OpDAT adapter MTP® Type A	OM3	1509005MA-I
		OM4	1509007MA-I
		OM5	1509008MA-I
		APC OS2	1509009MA-I
G	OpDAT adapter MTP® Type B	OM5	1509008MB-I
		OM4	1509007MB-I
1	OpDAT FAST™ Connector kit **LC PC OM3/OM4 for buffers**	PU 10	1509MAJO0010-F
		PU 20 incl. tool	1509MAJO002C-F
		PU 100 incl. tool	1509MAJO010C-F
1	OpDAT FAST™ Connector kit **LC PC OM3/OM4 for cable**	PU 10	1509MKJO0010-F
		PU 20 incl. tool	1509MKJO002C-F
		PU 100 incl. tool	1509MKJO010C-F
1	OpDAT FAST™ Hybrid Connector kit **LC APC OS2 for buffers**	PU 10	1509QAJA0010-E
		PU 20 incl. tool	1509QAJA002C-E
		PU 100 incl. tool	1509QAJA010C-E
1	OpDAT FAST™ Hybrid Connector kit **LC UPC OS2 for buffers**	PU 10	1509QAJO0010-E
		PU 20 incl. tool	1509QAJO002C-E
		PU 100 incl. tool	1509QAJO010C-E
1	OpDAT FAST™ Hybrid Connector kit **LC APC OS2 for cable**	PU 10	1509QKJA0010-E
		PU 20 incl. tool	1509QKJA002C-E
		PU 100 incl. tool	1509QKJA010C-E
1	OpDAT FAST™ Hybrid Connector kit **LC UPC OS2 for cable**	PU 10	1509QKJO0010-E
		PU 20 incl. tool	1509QKJO002C-E
		PU 100 incl. tool	1509QKJO010C-E
2	OpDAT FAST™ Connector kit **SC PC OM3/OM4 for buffers**	PU 10	1509MAEO0010-F
		PU 20 incl. tool	1509MAEO002C-F
		PU 100 incl. tool	1509MAEO010C-F
2	OpDAT FAST™ Connector kit **SC PC OM3/OM4 for cable**	PU 10	1509MKEO0010-F
		PU 20 incl. tool	1509MKEO002C-F
		PU 100 incl. tool	1509MKEO010C-F
2	OpDAT FAST™ Hybrid Connector kit **SC APC OS2 for buffers**	PU 10	1509QAEA0010-E
		PU 20 incl. tool	1509QAEA002C-E
		PU 100 incl. tool	1509QAEA010C-E
2	OpDAT FAST™ Hybrid Connector kit **SC UPC OS2 for buffers**	PU 10	1509QAEO0010-E
		PU 20 incl. tool	1509QAEO002C-E
		PU 100 incl. tool	1509QAEO010C-E
2	OpDAT FAST™ Hybrid Connector kit **SC APC OS2 for cable**	PU 10	1509QKEA0010-E
		PU 20 incl. tool	1509QKEA002C-E
		PU 100 incl. tool	1509QKEA010C-E
2	OpDAT FAST™ Hybrid Connector kit **SC UPC OS2 for cable**	PU 10	1509QKEO0010-E
		PU 20 incl. tool	1509QKEO002C-E
		PU 100 incl. tool	1509QKEO010C-E

Compatibility – **without adapter plate**



*can only be used in combination with split seal 895154-I and a cable diameter between 6 mm and 15 mm. This reduces the protection class to IP66. For more information, see page 17.

	PRODUCT NAME	FEATURES	P/N
A	E-DAT Industry RJ45 adapter insert	-	1401200810MI
B	E-DAT Industry RJ45 field jack insert Cat. 6 Class E_A	T568A	1401100810MI
		T568B	1401800810MI
		PROFINET	1401900810MI
C	Cable connectors Class E_A	180°	130863-04-E
D	Cable connectors Class F_A	-	130863-02-E
E	M12 jack X-coded IP67, field-configurable	without flange	MMF881A315
		with flange	MMF881A315-0001
E	M12 jack D-coded IP67, field-configurable	with flange	MMF881A115-0001
F	M12 connector X-coded IP67, Cat.6_A	field-configurable, straight	MNF881A315-0001

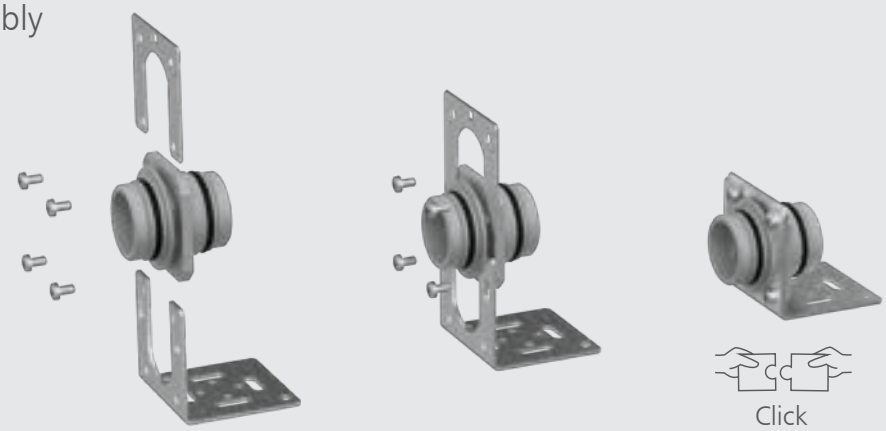
	PRODUCT NAME	FEATURES	P/N
F	M12 connector D-coded IP67, Cat. 5	field-configurable, straight	MNF881A115
F	M12 jack D-coded IP67	field-configurable	MMF881A115
G	OpDAT adapter SC-Simplex APC OS2	single	1509001A-I
		PU 50	1509001A-50
G	OpDAT adapter SC-Simplex UPC OS2	single	1509001B-I
		PU 50	1509001B-50
G	OpDAT adapter SC-Simplex	OM2, PU 50	15090012-50
		OM3, PU 50	1509001C-50
G	OpDAT adapter SC-Simplex	OM3	1509001C-I
		OM4	1509001D-I
		OM4, PU 50	1509001D-50

	PRODUCT NAME	FEATURES	P/N
G	OpDAT adapter SC-Simplex APC OS2	with shutter	1509001H-I
G	OpDAT adapter SC-Simplex OM5	single	1509001M-I
		PU 50	1509001M-50
H	OpDAT Industry LC-D adapter insert	Multimode (MM)	1402300820MI
		Singlemode (SM)	1402L00820MI
2	RJ45 field plug pro	$C6_A$	130E405032-E
		$C6_A$,PU 100	130E405032-K
		40G	130H405032-E
		25G	130G405032-E
		C5 PROFINET	130E405032PE
3	E-DAT Industry RJ45 field plug	Cat.6 Class E_A	1401405012-I
		PROFINET	1401405012PI
4	E-DAT field plug short	Cat.6 Class E_A	1401400812-E
5	E-DAT Industry connector	Cat.6 Class E_A	1401505012-E
6	E-DAT Industry connector	Cat.6 Class E_A	1401505010-E
7	OpDAT FAST™ Connector kit **SC PC OM3/OM4 for buffers**	PU 10	1509MAEO0010-F
		PU 20 incl. tool	1509MAEO002C-F
		PU 100 incl. tool	1509MAEO010C-F
7	OpDAT FAST™ Connector kit **SC PC OM3/OM4 for cable**	PU 10	1509MKEO0010-F
		PU 20 incl. tool	1509MKEO002C-F
		PU 100 incl. tool	1509MKEO010C-F
7	OpDAT FAST™ Hybrid Connector kit **SC APC OS2 for buffers**	PU 10	1509QAEA0010-E
		PU 20 incl. tool	1509QAEA002C-E
		PU 100 incl. tool	1509QAEA010C-E
7	OpDAT FAST™ Hybrid Connector kit **SC UPC OS2 for buffers**	PU 10	1509QAEO0010-E
		PU 20 incl. tool	1509QAEO002C-E
		PU 100 incl. tool	1509QAEO010C-E

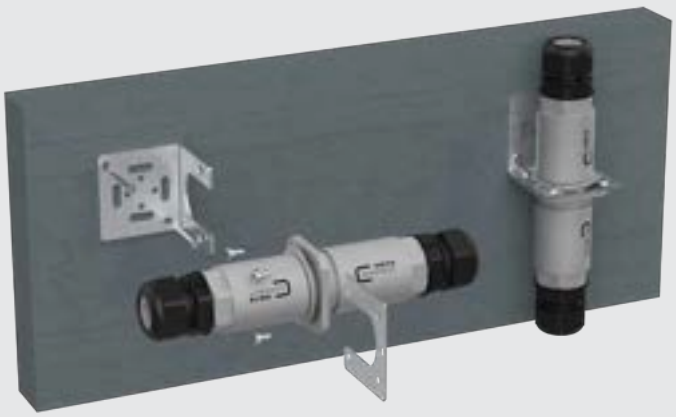
	PRODUCT NAME	FEATURES	P/N
7	OpDAT FAST™ Hybrid Connector kit **SC APC OS2 for cable**	PU 10	1509QKEA0010-E
		PU 20 incl. tool	1509QKEA002C-E
		PU 100 incl. tool	1509QKEA010C-E
7	OpDAT FAST™ Hybrid Connector kit **SC UPC OS2 for cable**	PU 10	1509QKEO0010-E
		PU 20 incl. tool	1509QKEO002C-E
		PU 100 incl. tool	1509QKEO010C-E
8	OpDAT FAST™ Connector kit **LC PC OM3/OM4 for buffers**	PU 10	1509MAJO0010-F
		PU 20 incl. tool	1509MAJO002C-F
		PU 100 incl. tool	1509MAJO010C-F
8	OpDAT FAST™ Connector kit **LC PC OM3/OM4 for cable**	PU 10	1509MKJO0010-F
		PU 20 incl. tool	1509MKJO002C-F
		PU 100 incl. tool	1509MKJO010C-F
8	OpDAT FAST™ Hybrid Connector kit LC **APC OS2 for buffers**	PU 10	1509QAJA0010-E
		PU 20 incl. tool	1509QAJA002C-E
		PU 100 incl. tool	1509QAJA010C-E
8	OpDAT FAST™ Hybrid Connector kit **LC UPC OS2 for buffers**	PU 10	1509QAJO0010-E
		PU 20 incl. tool	1509QAJO002C-E
		PU 100 incl. tool	1509QAJO010C-E
8	OpDAT FAST™ Hybrid Connector kit **LC APC OS2 for cable**	PU 10	1509QKJA0010-E
		PU 20 incl. tool	1509QKJA002C-E
		PU 100 incl. tool	1509QKJA010C-E
8	OpDAT FAST™ Hybrid Connector kit **LC UPC OS2 for cable**	PU 10	1509QKJO0010-E
		PU 20 incl. tool	1509QKJO002C-E
		PU 100 incl. tool	1509QKJO010C-E

Application examples – **set with mounting bracket**

Quick assembly



Wall mounting



Carrier rail mounting

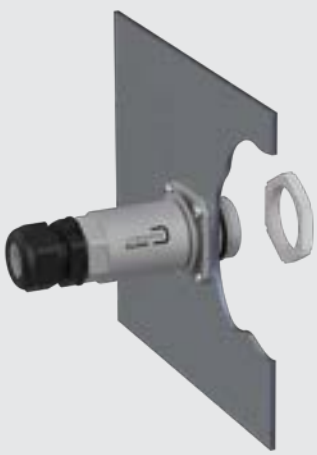


Mast mounting



Application example – **for wall and housing bushing**

Wall mounting

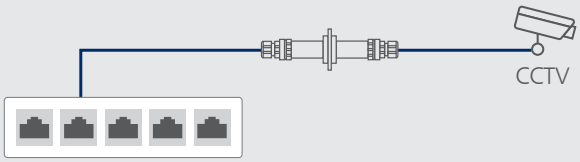


Application examples

Moving the active components

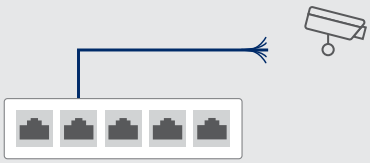
e.g. surveillance camera or wireless access point

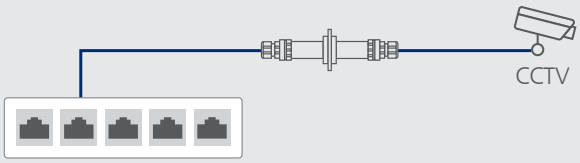




Cable extension

e.g. cable too short

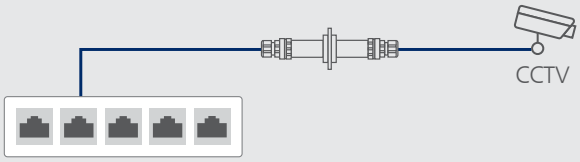




Repair

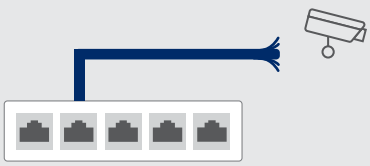
e. g. defective cable

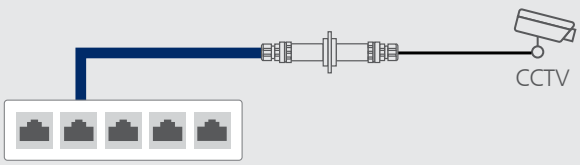




Reduction of the cable diameter

e. g. too rigid, fixed cable



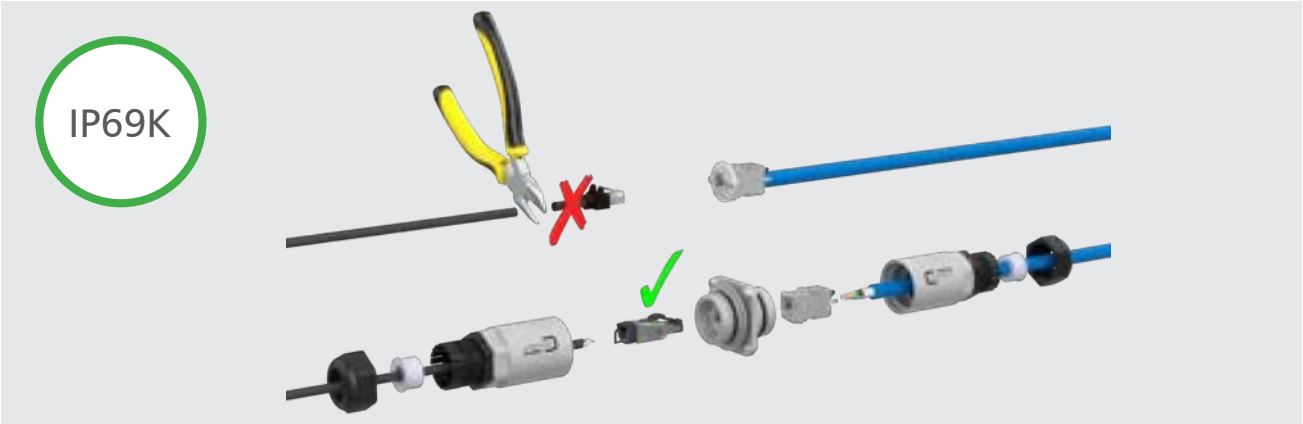


Notes on the protection of patch cables

The MCO IP69k protective housing for outdoor applications can be used to protect numerous interfaces as well as patch cable connections. Since RJ45 plugs cannot be passed through the seals included in the scope of delivery due to their dimensions, a remedy must be found.

To ensure IP69k protection, it is recommended to disconnect one side of the patch cable.

To be able to maintain the IP69k protection, ideally one plug side of the patch cable should be disconnected and replaced by a field-terminable plug, such as our $C6_A$ RJ45 field plug pro (130E405032-E), so that the installation can then be carried out according to the installation instructions.



The use of the split seal reduces the degree of protection to IP66 from IP69k.

Alternatively, we offer a split seal for patch cables (895154-I), which can be widened accordingly to allow the RJ45 connector to pass through. Consequently, patch cable connections can be protected without having to disconnect the connected RJ45 plug first. However, it is important to note that the use of the split seal for patch cables (895154-I) reduces the protection class from IP69k to IP66, which is why we only recommend this alternative option to a limited extent.



Furthermore, it should be taken into account that only cables suitable for outdoor installation may be used in outdoor areas, such as our patch cable RJ45 6kV Flex500 Outdoor AWG 24 (13084F3000-E).


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